LISTING OF CLAIMS

- 1 115. Canceled.
- 116. (Currently Amended) A method comprising:

receiving a first table and a second table, in a computer system; receiving input data, in a computer system, wherein

the input data comprises a query, a first table, and a second table;

generating, using a processor of the computer system, a set of SQL statements to query the first table and the second table, wherein

the set of SQL statements are based, at least in part, upon the query,

the first table and the second table are stored in a computer-readable storage medium, [[and]]

the generating uses a relationship between the first table and the second table to construct the set of SQL statements, and

the set of SQL statements comprises SQL statements other than a statement that joins the first and second tables;

querying the first table using the set of SQL statements to produce a first result set, wherein

the querying the first table is performed using the processor;

querying the second table using the set of SQL statements to produce a second result set, wherein

the querying the second table is performed using the processor, and the querying the first table and the querying the second table are performed without joining the first table and the second table;

[[and]]

joining, using the processor, the first result set and the second result set to produce a third result set; and

returning the third result set, in response to the receiving the input data.

- 2 - Application No.: 10/750,703

- 117. (Previously Presented) The method of claim 116 wherein the relationship comprises:
- a parent/child relationship between the first and second tables, wherein one of the first and second tables is a parent table, and if the first table is the parent table, the second table is a child table, and if the second table is the parent table, the first table is the child table.
- 118. (Previously Presented) The method of claim 117 further comprising: querying the parent table using the set of SQL statements to produce the first result set; and
- using the first result set in constructing a second set of SQL statements to query the child table, wherein
 - the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.
- 119. (Previously Presented) The method of claim 118 further comprising: querying the child table using the second set of SQL statements to produce the second result set.
 - 120. (Currently Amended) The method of claim 119 wherein the third result set depends on the querying the first table and the querying the second table.

further comprising: returning the third result set as a result of the query of the first and second tables.

- 121. (Previously Presented) The method of claim 118 wherein the second set of SQL statements comprises:
 - a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.

- 122. (Previously Presented) The method of claim 116 further comprising: using the first result set in constructing a second set of SQL statements to query the second table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.
- 123. (Previously Presented) The method of claim 122 further comprising: querying the second table using the second set of SQL statements to produce the second result set.
- 124. (Previously Presented) The method of claim 123 further comprising: returning the third result set as a result of the query of the first and second tables.
 - 125. (Previously Presented) The method of claim 122 wherein the second set of SQL statements comprises:
- a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.
- 126. (Previously Presented) The method of claim 116 further comprising: obtaining a search specification for the query of the first and second tables, wherein
 - the set of SQL statements comprises a query statement to select a record from at least one of the first and second tables if the record satisfies the search specification.
- 127. (Previously Presented) The method of claim 126 further comprising: executing the set of SQL statements to produce the third result set; and returning the third result set in response to the search specification.

- 4 - Application No.: 10/750,703

128. (Currently Amended) A system comprising:

a processor;

a memory unit coupled to the processor;

receiving means for receiving a first table and a second table input data,

wherein

the input data comprises a query, a first table, and a second table;

generating means for generating a set of SQL statements to query the first table and the second table, wherein

the set of SQL statements are based, at least in part, upon the query,

the generating means uses a relationship between the first table and the second table to construct the set of SQL statements, and the set of SQL statements comprise SQL statements other than a statement that joins the first and second tables:

- determining means for determining if a parent/child relationship exists between the first and second tables;
- first querying means for querying the first table using the set of SQL statements to produce a first result set;
- second querying means for querying the second table using the set of SQL statements to produce a second result set, wherein the querying the first table and the querying the second table are performed without joining the first table and the second table;

 [[and]]
- joining means for joining the first result set and the second result set to produce a third result set, wherein
 - the generating means, the determining means, the first querying means, the second querying means and the joining means reside in the memory unit; and

returning means for returning the third result set, in response to receiving the input data.

129. (Previously Presented) The system of claim 128 further comprising: parent table determining means for determining if one of the first and second tables is a table, if the parent/child relationship exists, and configured to indicate

if the first table is the parent table, that the second table is a child table, and

if the second table is the parent table, that the first table is the child table, wherein

the parent table resides in the memory unit.

- 130. (Previously Presented) The system of claim 129 further comprising: querying means for querying the parent table using the set of SQL statements to produce the first result set; and
- using means for using the first result set in constructing a second set of SQL statements to query the child table, wherein
 - the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table, and the querying means and the using means reside in the memory unit.
- 131. (Previously Presented) The system of claim 130 wherein the second querying means is configured to query the child table using the second set of SQL statements to produce the second result set.
- 132. (Currently Amended) The system of claim 131 wherein the result depends on the querying the first table and the querying the second table.

further comprising: returning means for returning the third result set as a result of the query of the first and second tables, wherein the returning means resides in the memory unit.

- 133. (Previously Presented) The system of claim 130 wherein the second set of SQL statements comprises:
 - a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.
- 134. (Previously Presented) The system of claim 128 further comprising: using means for using the first result set in constructing a second set of SQL statements to query the second table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table, and said using means resides in the memory unit.
- 135. (Previously Presented) The system of claim 128 further comprising:
 obtaining means for obtaining a search specification for the query of the first and
 second tables, wherein
 the set of SQL statements comprises a query statement to select a record
 from at least one of the first and second tables if the record
 satisfies the search specification, and
 said obtaining means resides in the memory unit.
- 136. (Previously Presented) The system of claim 135 further comprising: executing means for executing the set of SQL statements to produce the third result set; and
- returning means for returning the third result set in response to the search specification, wherein
 - said the executing means and the returning means reside in the memory unit.

137. (Currently Amended) A computer program product comprising: receiving instructions to receive a first table and a second table input data, wherein

the input data comprises a query, a first table, and a second table;

generating instructions to generate a set of SQL statements to query the first table and the second table, wherein

the set of SQL statements are based, at least in part, upon the query,

the generating instructions are configured to use a relationship between the first table and the second table, and

the set of SQL statements comprises SQL statements other than a statement that joins the first and second tables; and

first querying instructions to query the first table using the set of SQL statements to produce a first result set;

second querying instructions to query the second table using the set of SQL statements to produce a second result set, wherein the querying instructions to the first table and the querying instructions to the second table are performed without joining the first table and

the second table; [[and]]

joining instructions to join the first result set and the second result set to produce a third result set;

returning instructions to return the third result set, in response to receiving the input data; and

<u>a</u> computer-readable storage medium, wherein the computer program product is encoded in the computer readable storage media.

- 138. (Previously Presented) The computer program product of claim 137 wherein the relationship comprises:
- a parent/child relationship between the first and second tables, wherein one of the first and second tables is a parent table, and if the first table is the parent table, the second table is a child table, and if the second table is the parent table, the first table is the child table.
- 139. (Previously Presented) The computer program product of claim 138 further comprising:
- querying instructions configured to query the parent table using the set of SQL statements to produce the first result set; and
- using instructions configured to use the first result set in constructing a second set of SQL statements to query the child table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.
- 140. (Previously Presented) The computer program product of claim 139 wherein
- the second querying instructions are configured to query the child table using the second set of SQL statements to produce the second result set.
- 141. (Currently Amended) The computer program product of claim 140 wherein
- the third result set depends on the querying the first table and the querying the second table.
- further comprising: returning instructions configured to return the third result set as a result of the query of the first and second tables.

142. (Previously Presented) The computer program product of claim 139 wherein

the second set of SQL statements comprises:

- a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.
- 143. (Previously Presented) The computer program product of claim 137 further comprising:
- using instructions configured to use the first result set to construct a second set of SQL statements to query the second table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.
 - 144. (Previously Presented) The computer program product of claim 137 further comprising:
- obtaining instructions configured to obtain a search specification for the query of the first and second tables, wherein
 - the set of SQL statements comprises a query statement to select a record from at least one of the first and second tables if the record satisfies the search specification.
- 145. (Previously Presented) The computer program product of claim 144 further comprising:
- executing instructions configured to execute the set of SQL statements to produce the third result set; and
- returning instructions configured to return the third result set in response to the search specification.

- 10 - Application No.: 10/750,703

146. (Currently Amended) A computer system comprising:

a processor to execute instructions; and
a memory to store the instructions, wherein
the memory is coupled to the processor, and

the instructions comprise:

receiving instructions configured to receive a first table and a

second table input data, in a computer system, wherein

the input data comprises a query, a first table, and a

second table;

generating instructions configured to generate a set of SQL statements to query the first table and the second table, wherein

the set of SQL statements are based, at least in part, upon the query,

the generating instructions use a relationship between a first table and a second table to construct the set of SQL statements, and

the set of SQL statements comprises SQL statements other than a statement that joins the first and second tables.

first querying instructions to query the first table using the set of SQL statements to produce a first result set;

second querying instructions to query the second table using the set
of SQL statements to produce a second result set, wherein
the querying instructions to the first table and the querying
instructions to the second table are performed
without joining the first table and the second table;
[[and]]

joining instructions to join the first result set and the second result set to produce a third result set; and

returning instructions to return the third result set, in response to receiving the input data.

- 147. (Previously Presented) The computer system of claim 146 wherein the relationship comprises:
- a parent/child relationship between the first and second tables, wherein one of the first and second tables is a parent table, and if the first table is the parent table, the second table is a child table, and if the second table is the parent table, the first table is the child table.
- 148. (Previously Presented) The computer system of claim 147 wherein the instructions further comprise:
- querying instructions configured to query the parent table using the set of SQL statements to produce the first result set; and
- using instructions configured to use the first result set in constructing a second set of SQL statements to query the child table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.
 - 149. (Previously Presented) The computer system of claim 148 wherein the second querying instructions are configured to query the child table using the second set of SQL statements to produce the second result set.
- 150. (Currently Amended) The computer system of claim 149 wherein the third result set depends on the querying the first table and the querying the second table.

the instructions further comprise:

returning instructions configured to return the third result set as a result of the query of the first and second tables.

- 151. (Previously Presented) The computer system of claim 148 wherein the second set of SQL statements comprises:
 - a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.
 - 152. (Previously Presented) The computer system of claim 146 wherein the instructions further comprise:
- using instructions configured to use the first result set to construct a second set of SQL statements to query the second table, wherein
 - the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table.
 - 153. (Previously Presented) The computer system of claim 146 wherein the instructions further comprise:
 - obtaining instructions configured to obtain a search specification for the query of the first and second tables, wherein the set of SQL statements comprises a query statement to select a record from at least one of the first and second tables if the
 - 154. (Previously Presented) The computer system of claim 154 wherein the instructions further comprise:

record satisfies the search specification.

- executing instructions configured to execute the set of SQL statements to produce the third result set; and
- returning instructions configured to return the third result set in response to the search specification.

- 155. (Currently Amended) A computer system comprising:
- a processor;
- a memory unit coupled to the processor;
- a receiving module configured to receive a first table and a second table input
 data, wherein

the input data comprises a query, a first table, and a second table;

a generating module configured to generate a set of SQL statements to query the first table and the second table, wherein

the set of SQL statements are based, at least in part, upon the query,

the generating module uses a relationship between a first table and a second table, and

- the set of SQL statements comprises SQL statements other than a statement that joins the first and second tables;
- a first querying module configured to query the first table using the set of SQL statements to produce a first result set;
- a second querying module configured to query the second table using the set of SQL statements to produce a second result set, wherein the query of the first table and the query of the second table are performed

without joining the first table and the second table; [[and]]

- a joining module configured to join the first result set and the second result set to produce a third result set, wherein
 - the generating module, the determining module, the first querying module, the second querying module and the joining means reside in the memory unit: and

a return output data module configured to return the third result set, in response to receiving the input data.

- 156. (Previously Presented) The computer system of claim 155 wherein the relationship comprises:
- a parent/child relationship between the first and second tables, wherein
 one of the first and second tables is a parent table, and if the first table is
 the parent table, the second table is a child table, and if the second
 table is the parent table, the first table is the child table, and
 the parent table resides in the memory unit.
 - 157. (Previously Presented) The computer system of claim 156 further comprising:
- a querying module configured to query the parent table using the set of SQL statements to produce the first result set; and
- a using module configured to use the first result set in constructing a second set of SQL statements to query the child table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table, and the querying module and the using module reside in the memory unit.
- 158. (Previously Presented) The computer system of claim 157 wherein the second querying module configured to query the child table using the second set of SQL statements to produce the second result set.
 - 159. (Currently Amended) The computer system of claim 158 wherein the third result set depends on the querying the first table and the querying the second table.

further comprising:

a returning module configured to return the third result set as a result of
the query of the first and second tables, wherein
the returning module resides in the memory unit.

- 160. (Previously Presented) The computer system of claim 157 wherein the second set of SQL statements comprises:
 - a query statement for selecting a record having a value of a foreign key field of the second table equal to a value of a target key field in the first result set.
 - 161. (Previously Presented) The computer system of claim 155 further comprising:
- a using module configured to use the first result set to construct a second set of SQL statements to query the second table, wherein the second set of SQL statements comprises SQL statements other than a second statement that joins the second table to another table, and said using module resides in the memory unit.
 - 162. (Previously Presented) The computer system of claim 155 further comprising:
- an obtaining module configured to obtain a search specification for the query of the first and second tables, wherein
 - the set of SQL statements comprises a query statement to select a record from at least one of the first and second tables if the record satisfies the search specification, and said obtaining module resides in the memory unit.
 - 163. (Previously Presented) The computer system of claim 162 further
 - comprising:
- an executing module configured to execute the set of SQL statements to produce the third result set; and
- a returning module configured to return the third result set in response to the search specification, wherein
 - said the executing module and the returning module reside in the memory unit.